

RAYOS CONTRA CANCER

Education | Clinic Development | Research

Education

We are very excited about the completion of our IMRT ECHO Curriculum with clinics in Bolivia and Argentina (pg. 1). We also are proud to provide a recap of our HDR Brachytherapy Curriculum across 10 participating LMIC centers, and vision for next steps in education. Learn more on page 3!

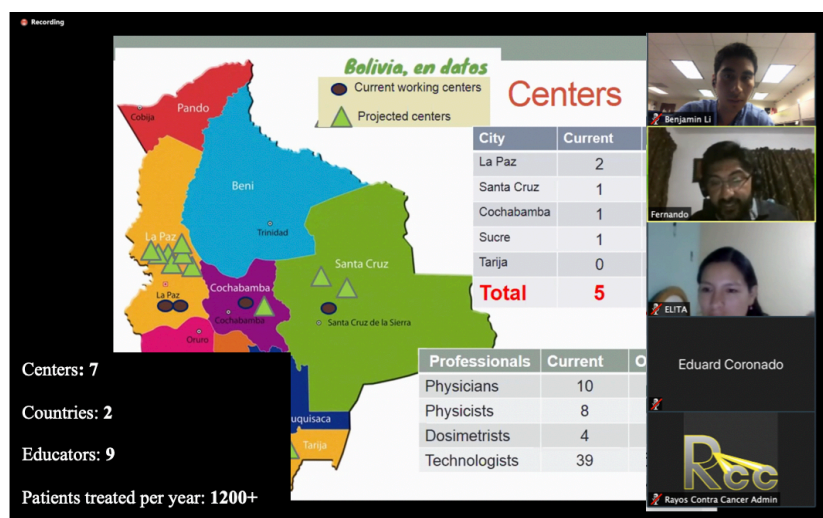
Research

Latin American Residents in Radiation Oncology (LARRO) recently completed its first project looking at the curriculums of all radiation oncology training programs in Latin America. LARRO members are now teaming up to publish these results, which were accepted for presentation at ESTRO. Learn more on page 2!

Clinic Development

We recently had two educators who participated in our telehealth HDR Brachytherapy curriculum visit clinics who participated in the sessions. Dan Scanderbeg was able to go to Kathmandu Cancer Center in Nepal and Claire Dempsey visited the Cancer Diseases Hospital in Zambia. We were excited about the opportunity to engage members of these clinics in person and be able to conduct more hands-on support and training to supplement the telehealth sessions that had been conducted. Learn more about their trips on page 3!

Transitioning from 3D to IMRT



On September 25th, we launched RCC's IMRT ECHO Curriculum to support seven participating centers in Bolivia and Argentina who were all interested in transitioning to deliver intensity modulated radiotherapy (IMRT) as a new standard of care. The training program consisted of seven education sessions on medical physics and clinical aspects of IMRT relevant to developing settings. These sessions were held once a week using the ECHO platform, and were led by various physicians and medical physicists from Fox Chase Cancer Center, an affiliate academic institution Rayos Contra Cancer is proud to be working with! Each session consisted of a professional presentation with opportunities for live questions. Additionally, an in-depth presentation on the state of radiotherapy in Bolivia was presented by Fernando Matos, Eduard Coronado, Eliana Ugarte, Emilio Rodriguez, and Cesar Tapia. Participants underwent a final exam, consisting of 2-3 questions developed by each educator, with a follow-up call to review answers. This program was reviewed positively as a first step towards transitioning from 3D to IMRT, where

Volunteer of the Year

Peter Sandwall

The RCC family is excited to



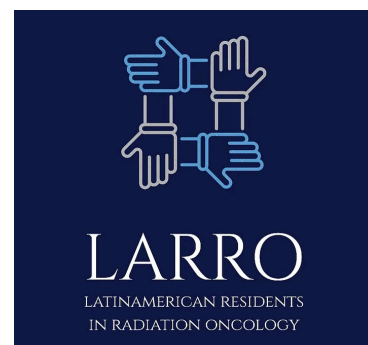
announce that we have named Peter Sandwall our 2019 Volunteer of the Year! Peter has been integral in our educational and clinic development efforts this year. He has served as an educator in the SRS/SBRT, HDR Brachytherapy, and IMRT curriculums, dedicating his time and expertise to helping clinics in LMICs improve the delivery of care to their patients. Also, he has helped onsite in Guatemala with INCAN, organizing new collaborative efforts in Bolivia, and outlining a long-term vision for medical physicist development in Latin America. Thank you, Peter for everything you do for RCC!

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clinics hope to utilize new technology for better care.

Latin American Residents in Radiation Oncology (LARRO)

LARRO is a group that aims to unite residents in radiation oncology across Latin America to collaborate, improve, and advance in their studies and in their exposure to different curriculums and techniques not available in their own countries or programs. This group of dedicated and motivated individuals has already completed their first project in which they were able to analyze the curriculums of successful radiation oncology residencies in Latin America. This work has been accepted to the European Society of Radiation Oncology (ESTRO) Annual Conference for presentation, while the team works on publishing their findings and conclusions. We are extremely proud and excited about the completion of this project and look forward to the continued efforts of this group. Additionally, Rayos Contra Cancer has created a section of their webpage dedicated to the mission, objectives, and values of LARRO. This information can be found at www.rayoscontracancer.org/larro.



...sneak peak: Understanding Artificial Intelligence Needs

In RCC's first collaboration with MAIA Labs from UTSW (Medical Artificial Intelligence and Automation), we are conducting a study to understand pain points, perspectives, and opportunities to accelerate development in cancer care with new artificial intelligence solutions. A detailed survey was distributed across Latin America with excellent participation across 14 countries, thanks to all of our local supporters! We believe in engineering solutions from the

Layth Mula-Hussain

Board Member



Dr. Layth "Yahya Ibrahim" Mula-Hussain is a physician with a storied experience in the oncology academia and community service. Layth grew up in Iraq where, at a young age, he lost his brother to cancer, which spurred his own studies into radiation oncology and how the landscape of a country suffering through war and conflicts may impact the care of its cancer patients. After his training abroad, he returned to Iraq to establish its first board training program in radiation oncology at the Zhianawa Cancer Center.

A testament to his commitment to global oncology, he recently attended the Cairo University National Cancer Institute's International Oncology Conference and delivered an **extremely informative presentation regarding global health in radiation oncology**. The presentation can be found and downloaded [here](#) as well as on the Rayos Contra Cancer website.

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ground up, and to address the global cancer crisis, we need to unite our respective strengths and perspectives for patient care. Results are forthcoming.

HDR Brachytherapy: Telehealth Training Complete!

In November 2019, we completed the HDR Brachytherapy Curriculum, consisting of 18 educator-led sessions on various topics in HDR brachytherapy. We had 10 participating LMIC cancer centers in Africa, the Middle East, and Nepal who provided (and continue to provide us) positive feedback about their experiences and the program's perceived impact.

Dear Ben and all the RCC staff

Hope this e-mail will find you in the best health condition.

We are well and very pleased with the work done by the RCC team, its trainers and all the logistics provided to make the sections happen in the best possible way of transmission.

It was very productive for us as we were able to gain a lot of confidence in developing high dose rate brachytherapy related activities, from implementing a new high dose rate brachytherapy program to the best dosimetry planning techniques.

The country, the hospital, the radiotherapy service and the professionals involved in this training program, we thank you with all our heart. We look forward to sharing all our future practices.

The Maputo Central Hospital Radiotherapy Service team coordinated by me participated with 2 medical physicists and two radiation oncologists.

We look forward to working with the centers involved in this program and we ask you to circulate a contact list.

-Ainadine Momade

... and Now Conducting Onsite Training

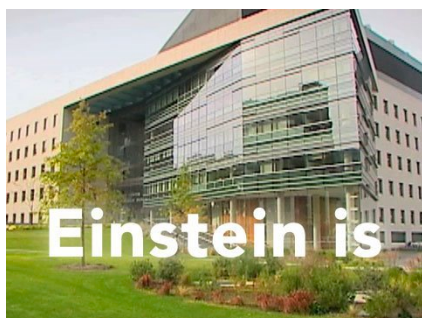
In addition to the completion of our online curriculum, we have now been able to send educators to participating clinics in order to perform on-site training. Two have traveled so far: Dan Scanderbeg to Kathmandu Cancer Center in Nepal and Claire Dempsey to Cancer Diseases Hospital in Zambia. They were able to review QA and old plans, as well as see

patients treated daily and review imaging in order to improve brachytherapy practices and clinic workflow. For the savvy reader, Dan specifically was able to see how providers were contouring all structures and still treating to Point A, and he demonstrated in which cases that was no longer necessary. After these visits, we were excited to hear about the enthusiasm expressed by members of the clinics about the ability to engage with educators on a more personal, hands-on basis. Additionally, there were marked improvements in treatment delivery after these on-site visits. In Nepal, Dan noticed that there was an unused ultrasound machine that he proceeded to train the therapists and oncologists on, allowing its usage for future patients. A sincere thank you and congratulations to Dan and Claire for their efforts! Upcoming travels include: Kevin Xu to Nigeria and Egypt, Kevin Khadevi to Jordan, Michael Tassotto to Ghana, and Sonja Dieterich to Mozambique.

RCC Partnership for ChartRounds Latin America

ChartRounds.com was established in 2010 by Patricia Hardenbergh, M.D. and aims to improve cancer care in the community setting, hoping to cure more lives, improve the appropriateness of patient selection criteria for treatment, perfect techniques of delivery of radiation and decrease normal tissue toxicities that may contribute to lives lost. Rural and community physicians today are challenged by the need to have a level of expertise in all cancer site treatments because they are expected to function as the “general practitioner” of oncology in their communities. ChartRounds addresses this challenge by connecting community physicians with academic colleagues. Using video conferencing, an educator hosts a session concentrating on a specific disease site and fellow physicians submit cases to be discussed in this collaborative environment. RCC has already helped ChartRounds with 3 sessions in their ChartRounds Latin America curriculum in 2019 and aims to expand this partnership in 2020, aiming to host up to one session each week.

Rayos Contra Cancer Launches Second Student Chapter: Albert Einstein College of Medicine



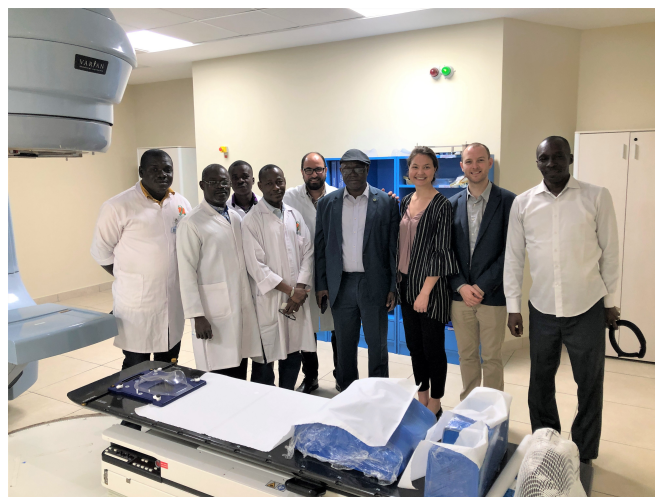
A new and highly motivated group of students have aided RCC in establishing a student chapter at their medical school, Albert Einstein College of Medicine in New York City, NY. They are passionate about helping RCC improve its social media presence and outreach, as well as creating a Project ECHO curriculum for

Radiation Therapist IMRT training. We are excited and will continue to aid these students in their journey in establishing this chapter through our RCC University on-boarding program.

Partnership Spotlight: BioVentures for Global Health

BioVentures for Global Health (BVGH) is a non-profit organization that works in both the public and private sectors to improve public health and has helped us match our HDR-Brachytherapy program with Nigeria. Through their African Access Initiative, they are focused on (1) establishing sustainable access to oncology medicines and technologies, (2) strengthening healthcare infrastructure, (3) building clinical oncology capacity, and (4) addressing the cancer data gap in Africa through clinical trials. BVGH has established AAI partnerships with governments and cancer hospitals in six African countries: Cameroon, Côte d'Ivoire, Kenya, Nigeria, Rwanda, and Senegal.

BVGH is now helping to plan Dr. Kevin Xu's trip to Nigeria as well as other accommodations that can make his trip as productive and meaningful as possible. In terms of next steps, BVGH is aiding RCC in finding other sites in Africa that could benefit from the same curriculum, as well as others that we develop. Working together, we can coordinate, communicate, and provide “just-in-time” training for developing clinics. Find out more at their website [here](#).



BVGH staff members Callie Weber and Daniel Seymour with leadership of the Radiation Oncology team at the new Centre National d'Oncologie Médicale et de Radiothérapie Alassane Ouattara (CNRAO), the University Hospital Center of Cocody, and the National Cancer Control Program at CNRAO in Abidjan, Côte d'Ivoire in April 2019.

We are proud of the work of all our partners, our volunteers, and the clinics we have had the honor to work with. The year 2019 was full of big events and changes, and we hope that each experience can help us grow stronger together. Happy holidays and let's raise against cancer! - Ben, Exec Director, RCC

This year, we will work to **build more ECHO training programs, reach more clinics, empower more global radiation oncology research and innovation**, and create a **generation of leaders through LARRO**. We also started receiving unsolicited donations (thank you!) in the mail, so we have made a [donation page](#) to make this process easier for you! We treat every dollar responsibly.

Are you interested in helping as an educator? Click whether [Radiation Oncologist](#), [Radiation Therapist](#) or [Medical Physicist](#) and we can notify you with a future opportunity! Interested to host or participate